D.) AMENDMENTS TO THE DRAWINGS

None.

E.) REMARKS

This Preliminary Amendment is being filed contemporaneously with this RCE Application to amend the claims to better define Applicant's invention. Upon entry of this amendment, claims 1-16, 18 and 20-23 will be pending in the Application.

The amendments included in this Preliminary Amendment are based on the specification, claims and drawings, as entered, from the Response under 37 C.F.R. 1.111 submitted on April 21, 2005 and incorporate any amendments that were presented in the Response under 37 C.F.R. 1.116 submitted on December 14, 2005.

To expedite prosecution of the Application, Applicant will address the Examiner's rejections and comments from the Final Office Action dated September 14, 2005 and the Advisory Action dated December 28, 2005 in view of the claims as presented in this Preliminary Amendment.

REJECTION UNDER 35 U.S.C. 102

A. Rejection of claims 1-10 and 16

The Examiner rejected claims 1-10 and 16 under 35 U.S.C. 102(b) as being anticipated by Zeller et al. (U.S. Patent No. 6,055,292), hereinafter referred to as "Zeller."

Several of the features recited by Applicant in independent claims 1 and 16 are not taught or suggested by Zeller. First, Zeller does not teach or suggest roto-translational movements that include one rotation movement and two transverse linear movements in a horizontal plane as recited by Applicant in independent claims 1 and 16. The apparatus in Zeller only discloses a rotational movement and, at best, one linear movement, i.e., movement in the vertical direction, but clearly does not discuss two transverse linear movements in a horizontal plane as recited by Applicant in independent claims 1 and 16. Thus, since Zeller does not teach or suggest all of the limitations recited in independent claims 1 and 16, Applicant respectfully submits that Zeller does not anticipate Applicant's invention as recited in independent claims 1 and 16.

Dependent claims 2-10 are believed to be allowable as depending from what is believed to be an allowable independent claim 1 for the reasons given above. In addition, claims 2-10 recite further limitations that distinguish over the applied art. In conclusion, it is respectfully

submitted that claims 1-10 and 16 are not anticipated nor rendered obvious by Zeller and are therefore allowable.

B. Rejection of claims 20, 22 and 23

The Examiner rejected claims 20, 22 and 23 under 35 U.S.C. 102(b) as being anticipated by Doebert et al. (U.S. Patent No. 5,511,106), hereinafter referred to as "Doebert."

Several of the features recited by Applicant in independent claims 20, 22 and 23 are not taught or suggested by Doebert. First, with regard to claims 20 and 22, Doebert does not teach or suggest the step of aligning the x-ray source with an x-ray imager includes the step of relocating the x-ray imager from a Panoramic position to a Cephalographic position with one of a manual mechanism or an automatic mechanism as recited by Applicant in independent claims 20 and 22. The system in Doebert has one embodiment for panoramic exposures and a second embodiment for cephalographic exposures, but does not disclose any technique or structure to relocate the imager between positions for the two different types of exposures as recited by Applicant in independent claims 20 and 22. Specifically, the cephalographic apparatus as shown in Figures 2 and 3 and described in Doebert at column 3, lines 36-38 is described as including "[a] boom 6 that carries the (second) head-holder 7 and positioning means is secured to the height-adjustable part 1a of the carrying column 1 (Fig. 2)." Thus, the description of the arm in the cephalographic apparatus of Doebert as being a boom, specifically precludes the "x-ray imager" in the cephalographic apparatus of Doebert from being moveable between a panoramic position and a cephalographic position. Thus, since Doebert does not teach or suggest all of the limitations recited in independent claims 20 and 22, Applicant respectfully submits that Doebert does not anticipate Applicant's invention as recited in independent claims 20 and 22.

With regard to claim 23, Doebert does not teach or suggest the step of starting a scanning process during which the x-ray beam is rotationally translated about a horizontal axis through a patient skull by a coordinated rotational movement of the collimator and the x-ray imager under computer control, while the x-ray source is fixed in position as recited by Applicant in independent claim 23. The system in Doebert discusses that the rotary unit can be rotated about a vertical axis, but fails to discuss any rotary movement of the diaphragms and the imager about a horizontal axis as recited by Applicant in independent claim 23. Furthermore, the system in

Doebert only provides for the linear movement of the diaphragms and the imager. *See e.g.*, Doebert, Figures 8 and 11.

Thus, since Doebert does not teach or suggest all of the limitations recited in independent claim 23, Applicant respectfully submits that Doebert does not anticipate Applicant's invention as recited in independent claim 23.

Therefore, for the reasons given above, independent claims 20, 22 and 23 are believed to be distinguishable from Doebert and therefore are not anticipated nor rendered obvious by Doebert.

REJECTION UNDER 35 U.S.C. 103

A. Rejection of claims 11, 14 and 15

The Examiner rejected claims 11, 14 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Zeller in view of Doebert.

Applicant submits that dependent claims 11, 14 and 15 are distinguishable from Zeller and/or Doebert for at least the following reasons. To begin, dependent claims 11, 14 and 15 are believed to be distinguishable from Zeller and/or Doebert as depending from what is believed to be an allowable independent claim 1 as discussed above. Furthermore, there is nothing in Doebert that teaches or suggests any of the limitations in independent claim 1 not taught or suggested by Zeller.

In conclusion, it is respectfully submitted that claims 11, 14 and 15 are not anticipated nor rendered obvious by Zeller and/or Doebert and are therefore allowable.

B. Rejection of claims 12 and 13

The Examiner rejected claims 12 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Zeller and Doebert in further view of Fairleigh (U.S. Patent No. 5,997,176), hereafter referred to as "Fairleigh."

Applicant submits that dependent claims 12 and 13 are distinguishable from Zeller, Doebert and/or Fairleigh for at least the following reasons. To begin, dependent claims 12 and 13 are believed to be distinguishable from Zeller, Doebert and/or Fairleigh as depending from what is believed to be an allowable independent claim 1 as discussed above. Furthermore, there

is nothing in Fairleigh that teaches or suggests any of the limitations in independent claim 1 not taught or suggested by Zeller and/or Doebert.

In conclusion, it is respectfully submitted that claims 12 and 13 are not anticipated nor rendered obvious by Zeller, Doebert and/or Fairleigh and are therefore allowable.

C. Rejection of claims 18 and 21

The Examiner rejected claims 18 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Doebert in view of Dobert et al. (U.S. Patent No. 6,570,953), hereafter referred to as "Dobert."

Several of the features recited by Applicant in independent claims 18 and 21 are not taught or suggested by Doebert in view of Dobert. First, with regard to claim 18, Doebert does not teach or suggest starting a scanning process during which the x-ray beam is linearly translated through a patient skull in a horizontal (Y) direction by a simultaneous and linear movement of the x-ray source and the x-ray imager in the horizontal direction under computer control as recited by Applicant in independent claim 18. The system in Doebert only discuss a pivoting or rotational movement of the radiator and does not discuss any linear movement of the radiator (x-ray source) in the horizontal direction as recited by Applicant in independent claim 18. Next, Dobert appears to only be applied for the teaching of correcting magnification distortion and not for any movement of the x-ray source. Further, there is nothing in Dobert that teaches or suggests the simultaneous and linear movement of the x-ray source and the x-ray imager in the horizontal direction as recited by Applicant in independent claim 18.

With regard to claims 18 and 21, Doebert does not teach or suggest the step of aligning the x-ray source with an x-ray imager includes the step of relocating the x-ray imager from a Panoramic position to a Cephalographic position with one of a manual mechanism or an automatic mechanism as recited by Applicant in independent claims 18 and 21. The system in Doebert has one embodiment for panoramic exposures and a second embodiment for cephalographic exposures, but does not disclose any technique or structure to relocate the imager between positions for the two different types of exposures as recited by Applicant in independent claim 21. Specifically, the cephalographic apparatus as shown in Figures 2 and 3 and described in Doebert at column 3, lines 36-38 is described as including "[a] boom 6 that carries the

(second) head-holder 7 and positioning means is secured to the height-adjustable part 1a of the carrying column 1 (Fig. 2)." Thus, the description of the arm in the cephalographic apparatus of Doebert as being a boom, specifically precludes the "x-ray imager" in the cephalographic apparatus of Doebert from being moveable between a panoramic position and a cephalographic position. Next, Dobert appears to only be applied for the teaching of correcting magnification distortion and not for any movement of the imager. Further, there is nothing in Dobert that teaches or suggests relocating the imager between positions for the two different types of exposures as recited by Applicant in independent claims 18 and 21.

In conclusion, it is respectfully submitted that claims 18 and 21 are not anticipated nor rendered obvious by Doebert and/or Dobert and are therefore allowable.

OBJECTION TO THE CLAIMS

The Examiner objected to claims 2, 8, 15 and 20 for various informalities.

In response thereto, Applicant has amended claim 2 to remove the reference to "conventional" in a manner believed to overcome the objection of the Examiner. With regard to claim 8, Applicant submits that the phrase "narrow x-ray beam" is a term that is readily understood by one skilled in the art and as such is not indefinite. In addition, the term "narrow x-ray beam" is discussed throughout Applicant's specification, thereby providing the proper antecedent in the specification for the term. With regard to claim 15, Applicant submits that the language objected to by the Examiner in the claim is clear. First, the language of claim 15 states "the patient positioning system is translated relative to a corresponding support frame," which stated differently is, the patient positioning system is moved with respect to the support frame. Next, the patient can be held in a firm position even though the patient positioning system is moving because the patient positioning system is moving relative to a support arm that is also moving and to which the patient positioning system is attached. In other words, the patient positioning system can move with respect to the support arm to counteract a movement of the support arm. More detail on this operation can be found on page 16, lines 9-13 of Applicant's Specification, which paragraph also provides antecedent for the use of "firm" in claim 15. With

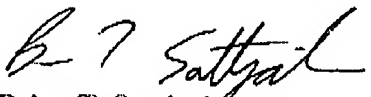
regard to claim 20, Applicant has amended the claim to correct the misspelling of "Cephalographic" in a manner believed to overcome the objection of the Examiner.

CONCLUSION

If the Examiner believes that prosecution of this Application could be expedited by a telephone conference, the Examiner is encouraged to contact the Applicant.

The Commissioner is hereby authorized to charge any additional fees and credit any overpayments to Deposit Account No. 50-1059.

Respectfully submitted,
McNEES, WALLACE & NURICK

By 

Brian T. Sattizahn
Reg. No. 46,401
100 Pine Street, P.O. Box 1166
Harrisburg, PA 17108-1166
Tel: (717) 237-5258
Fax: (717) 237-5300

Dated: January 16, 2006